

### REMARKS

Claims 59, 60, 63-68 and 109 are pending in the application with claims 1-57, 69-98 and 100-108 being withdrawn in view of the Restriction Requirement mailed September 26, 2006. Claims 59, 60, 63-68 and 109 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiss et al., *Nano Letters*, 2, (7), 781-784 (2002) (hereinafter "Reiss"). Claims 59, 60, 63-68 and 109 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiss in view of United States Patent 4,675,207 to Nicolau (hereinafter "Nicolau").

Applicants thank the Examiner and the Examiner's supervisor, Timothy Meeks, for the in-person interview conducted on July 22, 2009 regarding the present rejections. During the interview, Applicants argued one of skill in the art would not have a reasonable expectation that the alternating addition of cation and anion precursors to a reaction mixture of core nanocrystals would yield core/shell nanocrystals due to the presence of ligands on the core nanocrystals and the accumulation of surface charge on a nanometer scale solid. Applicants additionally argued that a rinsing step, as taught by Nicolau, cannot be successfully performed with nanocrystals.

Applicants and the Examiners agreed that amending the claims to recite "as-prepared" nanocrystals would eliminate the possibility of rinsing the nanocrystals and, therefore, exclude the Nicolau reference as rinsing is required in the Nicolau process. It was additionally agreed that requiring a plurality of monolayers would likely overcome the present rejection over Reiss.

Applicants have amended the present claims in accordance with agreements reached during the interview. Support for the present claim amendments is found in paragraphs [0015] and [0095] as well as elsewhere throughout the specification of the published application (US 2005/0129947). Additional support is found in the originally filed claim 58. Applicants respectfully request reconsideration of the present application in view of the forgoing interview and claim amendments and following remarks.

#### Claims 59, 60, 63-68 and 109 and 35 U.S.C. § 103(a)

The rejection of claims 59, 60, 63-68 and 109 under 35 U.S.C. § 103(a) as being unpatentable over Reiss is respectfully traversed.

For reasons consistent with those presented during the interview and the agreements reached during the interview, Applicants respectfully assert claims 59, 60, 63-68 and 109 are patentable over Reiss and respectfully request that the present rejection be withdrawn.

Claims 59, 60, 63-68 and 109 and 35 U.S.C. § 103(a)

The rejection of claims 59, 60, 63-68 and 109 under 35 U.S.C. § 103(a) as being unpatentable over Reiss in view of Nicolau is respectfully traversed.

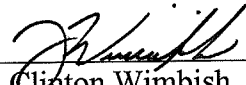
For reasons consistent with those presented during the interview and the agreements reached during the interview, Applicants respectfully assert claims 59, 60, 63-68 and 109 are patentable over Reiss in view of Nicolau and respectfully request that the present rejection be withdrawn.

**CONCLUSION**

An allowance of the claims is respectfully solicited. The Examiner is respectfully invited to contact J. Clinton Wimbish at 704.338.5021 to discuss any matter related to the present application.

Respectfully submitted,

11/25/09  
Date

  
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